Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NOTES AND ABSTRACTS.

Authority — Its Origin, Establishment and Limits.—1. *The existence of Authority.*—Authority and anarchy represent the positive and negative poles of human association. Between these two extremes has oscillated the human race from its beginning. The transition from the wandering tribes without leadership to the civilized condition of more advanced peoples is the work of authority. Among these authorities I include not merely gods, leaders in war, chiefs, the oldest men of the group, the sachem, priest, and sorcerer, but especially the founders of religion (Confucius, Laotse, Zarathustra, Buddha, Moses) and lawgivers (Draco, Solon, Lycurgus), givers together with laws and institutions. Human civilization without these authorities is unthinkable. Without the control of the unbridled instincts and impulses of the individual there can be no order in society.

In the more primitive societies the rulers are tyrants, and control is through *fear* on the part of the subjects toward the ruler. With the development of a higher civilization follow more refined forms of authority. The second stage may be characterized as that of *belief.* In order that the subject may continue to be ruled by *fear*, the conditions must be such as to allow personal oversight by the ruler. *Fear* is a ruling motive only under the influence of the visible authority. With extension of the group comes the impossibility of direct oversight on the part of the ruler and *fear* gives place to a *belief* in the omnipresence of the unseen authority. Consequently, with the progress of civilization, the gods become more and more unseen beings, the kings more unapproachable, and institutions and laws more abstract. This middle stage of authority based upon *belief* characterized the patriarchal condition of church and state up to the time of the French Revolution. Authority resting upon *belief* was shaken by the revolution, and the third stage or modern period may be characterized by an authority based upon *insight.*

2. *Origin of authority.*—The tendency to the constructing of authority may be traced back to the animal kingdom. Wherever in the struggle for existence there is need of a common activity, there arises the function of leadership. This tendency is found among the more primitive human societies, though in some cases it resolves itself into mere authority of the oldest men.

The races which remain in primitive anarchism do not have the capacity for taking on civilization. In the struggle for existence they are overcome by others which are under the dominion of authority, for discipline is the soul of struggle and authority is the soul of discipline. Races do not remain in the stage of anarchy because they lack intelligence, but rather they have not attained a higher intelligence because they have remained anarchical. Reason does not create the state, but, on the contrary, the state creates reason. Isolated or roaming peoples nowhere reach a high degree of civilization. It was in the cities, or rather city states, that a higher intellectual civilization was first produced. The close intermingling of men stimulates especially the mental qualities. It is in this way that the proposition is to be understood that the state forms reason. Without the building of the state, without authorities, without a firm structure of superiority and subordination, we should not have passed beyond the stage of mere primitive life.

The principle of authority is permanent, but the motives upon which it is based change. The oriental ruler possesses absolute authority; he is feared because the subject believes in his power. In the Middle Ages there is blind belief in gods and men. In the modern civilizations of western Europe and America authority in religion and state is based upon reason, intelligence, and insight.

3. *The establishment of authority.* — There is no civilization historically known to us that does not have hierarchical divisions, superiority and subordination, organization by means of authority. The first ground of authority, therefore, lies in its natural

growth. Without reflection, and motivated only by the instincts of self-preservation and of preservation of the species, authorities have been established. But while Nature commands a subjection to the principle of authority, she does not proclaim the kind of authority to be established. The latter function belongs to history, which teaches that the nature of the authority shall conform to the stage of the civilization. The steps in the development of authority are as follows: for the savage and barbarous peoples it is a natural necessity; for religious natures and sincere believers it is a necessity of feeling; for the utilitarian it is the necessity of purpose; finally, for the idealistic philosopher it is a necessity of reason.

It is to authorities, political, religious, scientific, and artistic, that we owe our order and progress. The highest formula in the promotion of progress is found in the proposition: *No civilization without authority.*

4. *Limits of authority.*— The exaggeration of authority leads to as great evils as the absence of it. The former suppresses individuality, the latter means dissolution and disorganization. Egypt furnishes an illustration of the stifling effects of despotic authority in ancient history, Byzantium in the Middle Ages, Spain in the modern period. Absolute authority everywhere has led to intellectual death, the destruction of all individual initiative, and to the stagnation of civilization.

From the positive side the solution of the problem of the limits of authority has been found by the Germanic peoples in the reconciliation of the principle of authority with the principle of freedom in the securing of authority in connection with the highest possible degree of freedom. The peculiar characteristic of the Germans is represented in this impulse for freedom, in the struggle for individuality. They formed families, clans, tribes, but no state. It was through contact with Rome that there arose the idea of the state among the Germans. At first the universalism of Rome in both political and religious realms conquered the individualism of the Germans. Then began the struggle between individualism and universalism, promoted by the Reformation, the conflict between church and state, the discoveries of science, the advance in philosophy, art, and invention, resulting in the principle of the equilibrium between authority and freedom.— LUDWIG STEIN, "Autorität: ihr Ursprung, ihre Begründung und ihre Grenzen," in *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich*, Heft 3. E. M.

The Power of the Social Mind in War.—If one takes into consideration the wars of recent times, such as the success of Germany, the brilliant victory of the United States in 1898, or the military progress of Japan; or if one attempts to penetrate into the spirit of the nations as portrayed in their different histories, he will find that the ruling force in these struggles has not been military fatalism or individual genius, but rather the *esprit de la nation* — a force as invisible as it is irresistible.

Wars have two different effects upon nations. In the one case, after the war the victorious nation sinks into a quiet condition again, while in the other it is aroused to a desire to continue the conflict. After the defeat of the Greeks in 1898 the Turks entered upon a peaceful and profound repose, whereas after the war of 1866 the Germans retained an ardent desire for war, searching for an occasion for its continuance elsewhere. The reason for this is that in the former type the excitation to war is from without, only a portion of the people being aroused, and that in a mechanical way; whereas in the second type inspiration for the war comes from the very heart of the nation, emotionally the whole nation is aroused, and a spontaneous reaction of the whole body of the people is the result. In the first category belong all the wars of the allies of Napoleon, in the second the barbarous invasions of all times.

Every event, public or private, is attributed by some moralists entirely to the will of the individual, by other writers entirely to fate. On the one hand we see a small number of very successful men who attribute their success entirely to personal characteristics; on the other hand we have the views of the great leaders of all times: Alexander, Hannibal, and Cæsar believed in *chance;* Gustavus Adolphus and Cromwell, in a *divine power;* Napoleon, in *his star;* all the faithful, in the *power of God;* and finally the oriental fatalists, in the *predestined lot* of man.

To say the will alone suffices in attaining an end is to exaggerate its influence. No effect has a single cause, but rather there is always present a complexity of causes. There is a chain of circumstances, a collective will, a social mind, an environment that favors the individual or restrains and thwarts his plans. The action resulting from the will of the individual and his environment we may call *reasonable fatalism.* This is difficult to comprehend or explain, because the second term "the social mind" and its phenomena are at present little understood, and especially difficult to measure. This makes the evaluation of this influence upon the individual a difficult matter.

Historians often attribute the success or decay of nations to certain persons. Especially in case of wars do they attribute victory or defeat to the commander-in-chief, and upon the fortunate one is bestowed the name of genius. Upon what is this assertion founded ?

In literature, art, and science we may say that the genius creates his work exclusively by means of his own ability; but are the troops of the commander-in-chief so docile or so much under control as the words of the author, the figures of the mathematician, or the reactions in the laboratory of the chemist? The phenomena of wars are so varied and complex that it is impossible for any human intelligence to control them. After the beginning of the battle the commander loses in large part the control of the conditions. He cannot follow the course of the movements, and in the tumult and smoke of battle even his orders are lost. Genius in war does not have the same significance as in literature or science. There is lacking the characteristic of absolute individuality both in conception and execution of the work. The execution is subordinated to the size of the armies and to a thousand circumstances, all of which may be summarized in the expression *the collective spirit of the two armies.*

There is then a greater force than that of man, whether general or emperor, and easier to study in the evolution of nations than an unknown fatalism. It is their mind, their spirit, with all the phenomena which it represents: intelligence, feeling, and will.

We do not desire to exclude the diverse external influences which act on the characteristics of this mind, such as the economic, religious, etc., but we are striving to establish the essence of this spirit which can determine the results independently of these conditions.

In the life of a nation, as in that of an individual, there is an evolution, a transformation, in which it gains a quality or a new property, or loses a characteristic of its personality. So, too, we see in certain epochs a nation seized with an irresistible desire to fight and giving itself up to a bloody internal revolution or to an aggressive external warfare. It is with this irresistible impulse that it is necessary to connect the expansion of the Macedonians under Alexander, the victories of the Romans under Scipio, the success of the French under Napoleon, etc. When this impulse leaves the people, this collective warlike spirit, then leadership, however strong, ceases to be successful in its efforts. Consequently the nation, being collective, in the evolution of its warlike feeling has an ascending course, an apogee, and a descending course; and the leader who does not follow this evolution of the collectivity will soon be punished. He will lose his influence and be crushed despite all his genius or his personal capacity. The most recent, as well as the most ancient, wars show that the social mind has exercised the primary influence; all other circumstances, including personal leadership, have been secondary.—Dr. CAMPEANO, "La force de l'âme collective dans les guerres," in *Revue internationale de sociologie,* October, 1902.

E. M.

Gas Leakage in American Cities.—There are very few American communities in which the facts of gas leakage in distribution, if known and comprehended, would not create a popular panic. Having studied this problem in every part of the United States and Canada, I am prepared to say that leakage ranges from 10 to 30 per cent. of output.

I will give the facts of one American city. The loss in distribution was about 11 per cent.; in round figures, three thousand millions of cubic feet. At 60 cents per thousand, this is $1,800,000 per annum, which the consumer must pay. This gas is known as water gas. It carries, on the average, 30.79 parts carbon monoxide, 30.14 parts hydrogen, 19.10 parts marsh gas, 10.69 parts olefiants; the remainder being nitrogen, carbon dioxide, and oxygen. This is a very formidable compound to go at large in a city. Most of the leakage is under measurably or absolutely impervious pavements. It cannot work its way up through the soil and escape, but most of it in one way or another gets into houses.

A large gas leakage is inconsistent with good pavements. If repairs are neglected, leakage quickly attains intolerable proportions. If necessary repairs are attended to, the streets are quickly scarred with patches. In the case of asphalt, the destruction due to gas leakage is rapid and complete. The binder of the asphalt is attacked by the olefiants and decomposed. The solution for this anxious municipal problem would appear to be in pipe galleries.

The fire hazard of gas leakage is incapable of exaggeration. It is enormously increased by the fact that gas which has passed even for a short distance through soil is thereby rendered nearly or quite odorless. A very large proportion of the unexplained fires in cities is due to gas. The inspectors of the Bureau of Buildings of New York lately began to look for gas in the air of theaters, music halls, and other places of public assembly, and rarely fail to find it in proportions ranging from 0.2 or 0.3 per cent. to 5 per cent. This is in summer, with all the ventilation possible.

The hygienic aspects are scarcely less serious. In the city under consideration the leakage carries between 35 and 40 per cent. of carbon monoxide, which is probably the most insidious blood poison known. Experiments upon animals warrant the belief that air containing anything more than 0.4 per cent. is capable of causing death in man, though anything over 0.2 per cent. would in many cases prove fatal. It has no smell or irritating properties. Oxygen absorbed by the lungs is normally taken up by the red matter of the blood, hemoglobin. Hemoglobin has affinity for oxygen, but it has enormously greater affinity for carbon monoxide—about 400 times greater. Hence, when the hemoglobin is saturated with carbon monoxide, oxygen can no longer be carried from the lungs to the tissues, and death ensues.

J. J. Concannon, M.D., of New York, who has very carefully studied gas poisoning, says: Few seem aware that carbon monoxide exerts its deleterious effect, be the quantity present ever so small. The principal cause of the anæmia and lowered vitality which sooner or later appears in all city workers is the illuminating gas with which the city atmosphere is heavily charged through leakage. When inhaled in large quantity, carbon monoxide causes a profound anæmia, often fatal. When the air contains but a small percentage, a less pronounced anæmia gradually but surely appears. Doubtless this will be recognized eventually as the cause of the readiness with which the city dweller contracts grippe, tuberculosis, pneumonia, and many other diseases. Chemical and microscopic examinations usually show the effect of prolonged city life upon the red blood cells.

Most of the evils attributed to "sewer gas" are due to carbon monoxide, which is not a product of organic decomposition in sewers, and which is there only because gas which leaks from mains into the soil tends to accumulate in just such pockets as the sewers offer. During April and May some very interesting experiments were conducted by the Committee on Hygiene of the New York County Medical Association. These pointed very clearly to the agency of unsuspected gas in causing types of persistent general malaise. When gas was found the patients were promptly removed to a different environment, with immediate recovery, only to relapse when temporarily returned. In each instance the access of gas was from the sewer, through the house drain, and its escape was from defects in the plumbing.

What is the remedy? If a remedy is not found, the time is not far distant when the gas industry will have to be suppressed as a public nuisance, dangerous to life and detrimental to health. Concealment of the truth is not a step in the direction of a solution of the problem. Let us know what we are dealing with, at least. To this end I advise an effort to secure the enactment of laws requiring gas companies to make their statistics public. Where leakage is found to be excessive, or where for any reason it entails or threatens danger to life or property, it should be the duty of the state board of health to investigate the causes and to take such steps to abate the nuisance as its powers may permit or the public interest demand. (The writer submits the form of a bill designed to meet the evil.)—JAMES C. BALES, M.E., PH.D., "Gas Leakage in American Cities," in *Municipal Journal and Engineer*, September, 1902.

R. M.

The Gambling Impulse.—The present study is an attempt to investigate the origin and nature of the instincts and motives involved in chance plays and gambling.

The Egyptians, Chinese, Japanese, Hindus, Persians, Jews, Greeks, and Romans, with their dice on their lots testify of the indigenous and ubiquitous character of gambling. The French, Germans, and English are scarcely less given to the practice of gambling than the older peoples first mentioned. The prevailing forms are the dice of the old time and the more recently popularized lottery. The attraction of the chance seems to have continued throughout the history of man, and the desperate stakes placed testify to the spell this charm has over man. The American Indians will not only lose all their possessions, but also will stake their wives and children, and even their own liberty. The Senecas had a popular belief that a certain gambling game would be enjoyed by them in the future life of the Great Spirit. The Malays of Sumatra, the Javanese, the Sulus are all addicted to desperate playing of chance games. The passion is nowhere else so strong as among savage and barbarous races. But both the universality and the desperate enchantment of the passion are remarkable.

The universality and the gradations of this disposition toward chance, risk, are seen in the various forms of hazard, from the commonplace remark, "I will risk not taking my umbrella," to the fearful staking of one's very life. An analysis of the replies obtained from sending out a topical questionnaire throws some light upon the psychology of uncertainty. A curve representing the disposition toward chance seems to follow closely in direction and height a curve showing changes in the faith or in the fear one has in one's own personal safety. This gambling curve varies in direction and intensity, just as would be expected, according to the age, physical condition, previous experience, and sex. It fluctuates much for the ages from ten to seventeen years in both sexes, as uncertain as is this period of adolescence. Later the prevailing tendency is stronger toward chance among men than among women. The gambling impulse seems to be a sort of balance between faith in self and distrust of self.

The psychological theories of the gambling impulse are few in number and inadequate in treatment. Avarice and love of wealth are not, as many have suggested, large elements in the case. A desire for a stimulus to call forth the natural activity of the mind; indolence, vacuity being an unnatural state of mind; a desire to forget self and be rid of the commonplace — these seem to be the real causes or explanation of the impulse. Professor Thomas has summed it up in his article on "The Gambling Instinct" thus: "Gambling is a means of keeping up the conflict interest and of securing all the pleasure-pain sensations of conflict activity with little effort and no drudgery; and, incidentally or habitually, it may be a means of securing money." The race has been evolved in an environment of uncertainty, and such an environment has become indispensable to alertness of the faculties. Reflex action, muscular co-ordination, memory, imagination, and judgment times are thereby quickened. Does not the condition of uncertainty hold the mind in a tonic and unrelaxed condition? The addition of the stake brings in a whole train of added states centering about the feeling of power. Hope and fear, joy and sorrow, emulation, aggression, instinct of domination, love of humiliating one's opponent, pugnacity, jealousy, envy are some of the affective states exercised.

A study of luck reveals that it is regarded as more than mere chance. It is significant that the implements of gambling of the primitive man are the same as those used for divination; the same methods are used now for gambling, now for divination. This use-connection suggests one characteristic of luck, that it is a sort of connection with the god, the will, the ruler of affairs. Luck names the attitude, favoring or frowning, of some hovering spirit, some "guardian angel," some "evil genius." Were luck a pure accidental content, it would scarcely have persisted in the life of the peoples, and been found in so many expressions of "lucky days," "unlucky numbers," the "lucky box," the "fortune wheel," etc. But another glance at the historical interpretation of luck, and there is revealed a sort of paradox; it tells of the passion for certainty. Instead of indicating a love of the uncertain, it testifies of the longing of the mind for the certain, the sure. From this viewpoint it is easily seen as akin to the principle of all religions, and the scientific thirst for knowledge, the elimination of the element of the uncertainty. This last observation finds confirmation in the corresponding intensity of the gambling impulse and the religious sentiment in many races, and from a correspondence between this chance impulse and the scientific spirit in many peoples.

This study makes some contribution to ethics. "Conduct is the result of latent biological forces; much conduct being the forced expression of highly anabolic, instinctive centers which have functioned through long previous periods in preserving the species. These resist for a long time regeneration, do not tend readily to become rudimentary, and hence are ever on the threshold of activity. Prohibition is impossible. If this activity is a menace to our present social conditions, substitutions must be offered. In other words, these instinct activities must be channelized into harmless courses."—CLEMENS J. FRANCE, in *American Journal of Psychology*, July, 1902.

T. J. R.

The Objective Necessity of Progress.—Whenever we go out of the narrow circle of our individual life to enter a larger life, we are struck by the great amount of suffering that surrounds us. In order to reconcile the need of happiness with the impossibility of happiness under existing conditions, mankind of today has elaborated a belief in progress, and this belief is a weapon in the struggle for existence. It may be defined as the certainty existing in us that the life of humanity moves toward an increase of happiness on earth, and toward a more complete and harmonious development of the individual.

The essential, eternal character, so to speak, of life is harmony between everything that lives and the environment. A living creature can exist only so long as the phenomena that pass within it are in a certain degree of harmony with those that pass without. If the environment becomes more complex, the organism must in turn become more complex or *perish*. Take an individual and suppose that some new factor appears in his narrow and simple sphere. The existence of the individual presupposes that his mind reflects with sufficient fidelity the objects that surround him, and that he knows how to react advantageously upon his environment. When a new factor appears, it must necessarily be reflected in his psychic life and produce some opportune reaction. *The complication of the environment necessarily entails the complication of the living being.*

The external world constantly tends to destroy the established harmony between the living being and its immediate environment. If the modifications which a new factor brings into the system of established relationships are too sharp, the organism perishes. If the conditions of existence change in a less violent manner, the organism, after a crisis more or less severe, succeeds in adapting itself to the new system of relationships. This necessarily causes a new complication in its organization. The more complex the organism, the easier it will be for it to avail itself of changes in the environment, and the better able it will be to protect itself against their harmful consequences. This is why, throughout the scale of living beings, the more elevated the organization, the better assured is the life of the organism, and the more independent it is of harmful changes in its environment.

It is in Spencer that we find the clearest and simplest definition of happiness: it is correspondence between the organism and its environment. Every organism tends to attain this correspondence. When this end is reached, life is pursued with the least possible expenditure of forces, without difficulty, without sharp interruptions. Subjectively, this correspondence expresses itself by the sentiment of happiness. It results, from this definition, that happiness can be realized under as many forms as there are species of living beings, or even individuals.

The simpler the organism, the more accidental and the more fragile is the combination of circumstances that permit it to live. This fact may be observed in the lower stages of human life. We can easily conceive of perfect harmony between primitive groups and their environment, that is to say, perfect happiness. But it is also certain that this harmony, this happiness, is always very unstable. For example, if the principal occupation is the chase, the harmony can be interrupted by the disappearance of the animal that affords nourishment.

Changes in the environment of man will always take place. It results from this fact that one factor, at least, among those that constitute causes of suffering will always be present. But, in revenge, the human personality, in its progressive growth, will always seize more readily the variations in the environment and become adapted without a profound crisis. A consequence of this will be the progressive growth of the human personality parallel to the increasing complication of the social environment.

What is comprehended in the expression "the growth of the human individuality"? It is, first, the development of the intellect, which permits man better to understand his environment and to react upon it advantageously. It is, next, the appearance of more varied interests, and, consequently, greater richness and complexity of the entire life. In proportion as social differentiation progresses and the number of social circles of which the individual forms a part increases, the phases of life which appear interesting and important become more numerous.

While the modern civilized man is discontented with his existence, this is explained by the difficulties of the internal crisis that he is undergoing. It is not easy for him to become adapted to the new, more complicated conditions of existence. Civilized man is an unfinished type, yet in formation, *im Werden*, and consequently lacking harmony. This is why his reaction to the influences of his surroundings is so painful.

In résumé, the progressive complication and differentiation of society cause a growth and complication of the human individuality, at the same time that they create for it a greater stability. In this is the objective necessity for progress.—ALEXANDRE IAROTSKY, "Nécessité objective du progrès," in *Revue internationale de sociologie*, July, 1902. R. M.

Safeguarding Young Girls.—The international congress, which has just closed its sessions at Paris, proposed in the interest of public morality and for the protection of young girls important modifications of existing national and international law. *La traité des blanches* (the traffic in white girls) is the name applied in France to a secret method of importing girls from different countries through which to recruit houses of prostitution. From time to time, the sad history of individual girls recovered from houses of prostitution has shown what skilful methods of trapping were used to decoy them into the well-laid nets; but it is only since a number of earnest men and women in different countries took hold of the matter, coupled with official investigations, that the extent and systematic character of the nefarious trade have been apparent. The revelations made by an inquiry of the Home Office a few years ago were sufficient to alarm the societies organized for the protection of young girls, and to show them that new measures must be taken to meet an almost unsuspected condition. The organizers and promoters of this form of commerce adopt the most refined and plausible means of trapping their prey. A common method is to insert an advertisement in various foreign journals for governesses, teachers, domestics, nurses, or shop girls. Arriving at her destination, the young girl is met by the agent, who regrets to inform her that the place she had come to fill has already been taken, but assures her that there will be another opportunity in a few days. Meanwhile, he suggests that she go to a hotel which he can recommend. At the end of some days they let her know what is expected of her. If she refuses, she is presented with a bill for board and lodging and is told that she cannot leave until she has paid her bill. Of course, the bill is made larger than the small sum of money which the girl possesses. She is strictly watched; she is incapable of effecting her escape. Deception, threats, and, in some cases, force may be employed to complete her subjection.

Germany is the only country in which legislation covers this form of crime. Though governments have been inactive, private philanthropic and protective societies have done a great deal to warn young girls in their own countries against undertaking such emigration, and to protect them on arrival in a strange land. Thus in all the European railways one may now find notices to girls traveling alone warning them against confiding in strangers and informing them where they may find shelter and protection in the large cities. L'Union Internationale des Amies de Jeune Fille has been organized for some twenty years, and, with a central bureau at Neuchatel, has agents and committees all over Europe, and has established homes in various cities. A Catholic union for the same purpose was founded in 1896, and is also well organized. Both of these international organizations work in harmony. In London the National Vigilance Association has been more recently organized to study and apply means to furnish moré perfect protection. However, it is evident that the authority and co-operation of the various governments must be secured for the repression of the traffic. This has been the character and the aim and the object of the congress just held at Paris.

The first two articles in the convention which have been signed by the delegates and are to be submitted to their governments for their ratification, embody important changes in the criminal codes of the various countries. Article I provides that whoever, to satisfy the passions of another, shall allure, entice, or lead away, even with her consent, a girl who is a minor, with a view to effect her seduction, shall be subject to punishment, even though the different acts which constitute the infraction may have been accomplished in different countries. A second article provides for punishment of those who by fraud, menace, or the aid of violence, or by any other means of constraint, have enticed for immoral purposes a girl or woman who has reached or passed the age of majority, even, as in the first case, when the illegal acts may have been committed in different countries.

Students of international law will recognize the important elements involved in the provision that the different countries shall no longer be prohibited from prosecuting an offender because the different acts constituting the offense have been committed in different countries.

The congress has expressed the opinion that the age in which the law should consider a girl as major for the disposition of her physical person should be the same age as that fixed for civil majority.

The protocol has been signed by delegates of the governments of Germany, Austria, Belgium, Denmark, Spain, Fance, Great Britain, Hungary, Italy, Norway, Sweden, Holland, Switzerland, Portugal, and Brazil. Much disappointment was expressed that the United States, though formally invited, had not sent an official delegate to the congress.— S. J. B., in *Evening Post* (New York). R. M.

The Condition of the Working Class in Russia.—A lack of information and of statistics makes complete knowledge of the condition of the working class in Russia impossible. But some notion of this condition can be had from the meager statistics and a study of how the laborers are living. In speaking of the industrial class in general, there must be noted two chief classes: first, those industrials that carry on small trades in their own homes in the country districts; and, second, those whose homes are in the country, but who go to the towns to work during the winter, returning to their farms at the beginning of agricultural work in the spring. The number of this second class is constantly decreasing, as the proportion of the population that owns its own home is decreasing. They remain in the towns working throughout the year. It is the primary purpose of this paper to study the condition of this second class of workingmen, as they have come to be employed in what Le Play has denominated *fabriques collectives.*

1. *As to the length of the workday.*— The two factors upon which the length of the work day depends are the development of the technique and the standard of life among the laborers. One may expect, therefore, to find the length of the workday to be long in Russia, for the technique is not highly developed and the standard of living is low. A severe political system has greatly hindered the development of this class by punishing with banishment or long imprisonment those trying to form unions or lead movements for the bettering of the laborer's condition. Despite these unfavorable surroundings, the Russian industrials are making some gains, and there are better days before them.

The law of 1897, following the great strike of 1896 in St. Petersburg, was a material and moral victory for the workingmen. The material returns, however, have been slight, because the efficacy of the law has been practically defeated by its malinterpretation and amendment. But the moral victory means much in that the workingmen have become conscious of their possible power, and both the government and the employers have been made aware of their claim to consideration. The fact that the law made eleven and one-half hours the length of the workday can only mean that men had been required to work very long hours indeed. This inference is verified by some statistics at command. In 1880 more than twelve hours were required in 20 per cent. of the factories; twelve hours or less were required in 80 per cent. In 1894 to 1895 twelve hours were demanded in 20 per cent. of the factories; more than eleven but less than twelve hours were demanded in 46 per cent.; while eleven hours or less were demanded in 34 per cent. But if the hours were long in the great factories, they were much longer in the home industry, ranging from fourteen hours to eighteen or nineteen. These excessive hours show their effect in the physical weakness of the laborers and in the high rate of mortality among them.

The law of 1897 attempted to regulate working overhours. But in its particularizing and its ambiguity it has effectually destroyed its value, and we find the normal day exceeded from one to three times per week, and increased by from three to eight hours in some places. The attempt to regulate night work is told in practically the same story.

2. *As to the wages received.*—No complete statistics are available for determining the average wages of the Russian working class. A comparison of the wages received in the province of Moscow and in the state of Massachusetts has some value when properly interpreted.

	WAGES FOR ONE MONTH.			
	Moscow.		Massachusetts.	
WORKERS.	Rubles.	Dollars.	Rubles.	Dollars.
Men	14.16	8.50[1]	98.19	59.90
Women	10.35	6.21	50.43	30.25
Youths	7.27	4.36	42.22	25.33
Children	5.08	3.48	31.56	18.94

The striking difference in favor of the Massachusetts laborer must be taken in connection with these facts; the Russian cost of food is much less, the standard of life is much lower, and the demands for expenditure much fewer, than the American. Yet it remains true that the Russian spends 57 per cent. of his income, while the American spends only 49 per cent. of his, for nourishment. The "truck system" is still enforced upon the Russian laborer, but against it and the other unfavorable conditions the intelligence of the working class is beginning to arouse them, and this means better days for the class.—W. RAKHMETOV, "La situation de la classe ouvrière en Russie," in *La Revue socialiste*, September, 1902. T. J. R.

Invention Considered as the Cause of Social Evolution.—The title poorly expresses my thought. When I say that social transformations are explained by the imitation of individual initiatives, I do not mean that invention is the only active force, or, to speak truly, that it is even the strongest force, but that it is the directive, determining, explicative force.

The direction of great, constant forces, of forces periodic in their action, is related to small, new, accidental forces, which, grafting themselves on the former, determine a new kind of periodic reproduction. In other words, a variation ingrafts itself upon repetitions and becomes a point of departure for new repetitions.

In the social world the element variation, accident, germ, is represented by the individual initiative, invention. The element repetition consists of climate, soil, race, as well as of tradition, custom, taught ideas, and acquired habits. Climate and race consist in periodic reproductions of movements. Periodic also are the successive generations of the same race that reproduces hereditarily the same characteristics, the same functions. On the other hand, tradition, custom, instruction, education, consist only in imitative repetitions, in the transmission of examples.

If periodic forces alone acted, there would be no social transformations. If individuals should resemble each other in all particulars, if hereditary repetition should be complete, without any individual variation, progress would be impossible. The question is how and why, in organized society, language, government, religion, morality, or art is modified at a given time.

To whatever category invention may belong, it has always the characteristic of being an intersection of imitative rays, an original combination of imitations.

The combination is always binary. Whatever may be the number of imitative rays required in order that from their intersection there may spring a new invention (itself destined to spread imitatively), they divide themselves into two groups, which unite as if there were only two elements to combine. Or rather, in a total invention we nearly always discover several acts of invention separated by some intervals, several elementary inventions, each of which is a binary combination, a coupling.

What is it which makes an original combination of imitative rays? Two things: (1) the characteristic mental state of the individual brain in which the meeting of rays takes place (this does not mean that the brain must be superior to others in all particulars, but merely that it must be different, more adapted to the kind of function it is to fill); (2) the direct view, in general of external reality perceived under a new aspect, by the individual brain that has momentarily escaped the social hypnosis. It is thanks to this perception of external nature at a new angle that the meeting of imitative rays in the brain of the savant, the engineer, the artist, becomes fecund and is transformed into invention. Thanks to this direct and genial contact with nature, two known ideas, which hitherto appeared to have nothing in common, appear united in a causal relationship. Newton, seeing an apple fall, conceived the fall of bodies and the movement of the moon around the earth as two similar phenomena, results of the same cause, universal gravitation.

---

[1] The ruble is taken at value of 60 cents.

Whatever, on the one hand, favors the spread and interference of examples, and whatever, on the other hand, favors variety, inequality, individual originality, tends to increase inventiveness, to push on to progress. An enlightened democracy need not fear individual singularities and superiorities, since, thanks to diffusive imitation, the singular and superior individual works only for the whole. All that is best in the individual becomes socialized.

Will advancing civilization render less and less necessary these diversities and even these individual superiorities? No, for, other things being equal, the simplest inventions appear first. In proportion as society renders easier the imitative expansion of ancient inventions, the difficulty of new inventions becomes greater, for the same reason that the longer a mine is exploited, the greater also becomes the difficulty of extracting new minerals. The greatest geniuses are needed in order that new branches may spring forth on the old trunk of mathematics, physics, biology, etc. It is as impossible for the average civilized man to rise to new inventions as it is for a child of five years to collect with his hands fruit six feet above his head. But when a great man has gathered fruit high on the boughs of the tree of science, men of the lowest races may eat thereof.—Condensed from a paper read by M. G. TARDE before the Sociétê de Sociologie de Paris, entitled, "L'invention considérêe comme moteur de l'évolution sociale," and published in *Revue internationale de sociologie* for July, 1902. R. M.

Education and the Social Ideal.—When education is consciously regarded as a process of social transformation, the educational necessity of a definite conception of the social end to be attained through education becomes apparent. The school cannot consciously assist in transforming society unless the teacher has clearly in mind an ideal humanity into which society is to be transformed.

There are at least three elements that must enter into a rational and realizable social ideal: (1) a high degree of social intelligence; (2) an improved social organization resulting from social economy; and (3) the co-operative spirit.

Social intelligence is a manifestation of social consciousness, with which it develops *pari passu*. It denotes the ability of society to act in the interest of its members. The development of the consciousness of the individual is the natural outcome of his experience in looking out for himself. The similar experience of each social group warrants us in assuming that social progress may be depended upon to develop the consciousness of each group, and this consciousness will manifest itself in the gradual formation of the social intelligence, which has been defined as that "consensus of individual intelligence which forms a public opinion, a public conscience, a public will, and is manifested in law, institutions, and administration." The intensification of the social consciousness and the improvement of social intelligence seem to be the inevitable concomitants of further social development.

Social intelligence will result in the social employment of the principle of economy. "The history of progress," says Ritchie, "is the record of a gradual elimination of *waste*." The elimination of waste is a characteristic of intelligent action. Progress in individual or social intelligence may be measured by the degree of economy practiced.

The third indispensable element of the social ideal is the co-operative spirit, and this element is implied by the other two. Compulsory co-operation in the attainment of a worthy social ideal means either that the social ideal conceived is not a rational one, or that the individual is not intelligent enough to see that his interests are bound up in its realization. Voluntary co-operation alone can eliminate the waste characteristic of modern society. Competition, it is said, is the mainspring of human progress. Competition, however, may be divided into rivalry in securing individual advantages, profit, social or political preferment, and the like, and a rivalry in promoting the common good. As a rivalry in the attainment of primarily individual ends, it is a transient phenomenon in society, and must give way to co-operation as rapidly as social intelligence is developed. Competition has indeed been a strong factor in social developmeut, but so also have tyranny, slavery, and cannibalism, and all the various forms of exploitation. Must these go on because, in the absence of social intelligence, they have served a purpose in social development?

Obviously, social organization is not directly the work of the school. As to social intelligence, the school is necessarily, with reference to knowledge, a distributing point. The mere distribution of knowledge, however, may not result in the development of social intelligence. A great function of the school is to socialize the knowledge distributed. The socialization of knowledge, however, is but a step in the transformation of the individual from the competitive to the co-operative type, and this the school should consciously attempt to do. Competition is now giving way to co-operation. Education should hasten the movement. It should strive to produce a different type of man; a man who employs his energy and talent in assisting his fellowmen to higher usefulness rather than in rendering their efforts nugatory or futile; a man whose motto is that of the English prince, "Ich dien'," and whose conduct illustrates his motto.

Modern education is chiefly engaged in developing the competitive type of individuality. The competitive man — the warrior, the "successful" man — is held up for emulation. Prizes, marks, honors, distinctions, take the place of functional pleasure in acquiring and using knowledge, and the gratification which always comes from successful co-operation toward a worthy end.

If the social ideal suggested is a practical and a desirable one, then the school should be consciously employed to realize it. It should never lose sight, of course, of its immediate aim of developing to the fullest possible extent the capacities and powers of the individual. But it must ever keep in mind the necessity of socializing these powers, of realizing a double aim. — IRA W. HOWERTH, "Education and the Social Ideal," in *Educational Review*, September, 1902. R. M.

Neo-Malthusianism in Australia.—The abnormal decrease in the growth of the population of Australia is one of the most serious and threatening conditions in relation to the future of that country. Earlier in the history of the country the growth of the population was extraordinarily rapid. The unprecedented economical development due to the great value of the natural resources of the country, the loans of English capital, and the indiscreet prodigality in dispensing of public lands, led to a rapid increase in the number of marriages and in the population.

Today the stratum of alluvium is exhausted, and the cultivation of the soil now demands greater capital. The yield of grains has fallen 40 per cent. When, in addition to this, one considers the devastation in grazing brought about by the continuous droughts and the fall of prices in the wool market, he can form a picture of the present economic conditions in Australia. The struggle for existence is no lighter there than in Europe or America. All kinds of occupations are overcrowded. This failing in the economical resources has exercised a strong influence upon the number of marriages and births in Australia, as, in fact, such a condition does everywhere.

Upon this question the official statistics speak with alarming clearness. According to Coghlan, the director of the Statistical Bureau of New South Wales, the number of births per one hundred marriages in the years from 1861 to 1898 fell from 30.61 to 20.21 per cent. in New South Wales, from 28.54 to 19.30 in Victoria. Since 1898 the percentage of births in Queensland fell from 28.80 to 20.80, in New Zealand from 28.16 to 21.42. This diminution in the percentage of births is found everywhere, and the conditions point toward a still greater decline.

Are there additional causes for this decline? The climate is healthful, and the death-rate is low, so that we must seek elsewhere for further causes of the condition. In the first place, it should be noticed that one-fifth of the women earn a living by means of their own work, and many employers will not hire married women. This tends to raise the age of marriage, and, therefore, to promote the decline in the birth-rate. Again, the families are, as a rule, small, especially in the cities. The theories of Malthus are followed. Almost everywhere the so-called *Zweikindersystem* of France is prevalent.

The decline in the birth-rate soon attracted the attention of the political economists of the country, who assigned three direct causes of the phenomenon: (*a*) that among all married women the number of fruitful marriages has declined; (*b*) that the birth-rate has fallen constantly and very considerably in the last twenty years; (*c*) that the women born in Australia are less fruitful than those immigrating from Europe.

In all the European countries, with the exception of France, the birth-rate is much higher. While in New South Wales, the most favorable division of the country in this relation, the birth-rate in 1898 was 28.42 per thousand, in England and Wales it was 29.4, in Scotland 30.8, in Germany 36.0. In the year 1890 in New South Wales the excess of births over deaths was 2.36 per cent., whereas ten years later, with a similar death-rate, the relation had fallen to 1.54 per cent. If this decline continues, the population can be maintained only through immigration. But the incentive for such a reinforcement is entirely absent at present, and it is difficult to see from what source it would come. In any case the increase will be very slow, and it seems very doubtful that the expectation according to which Australia ought to have eight million inhabitants within fifty years will be fulfilled.—EMIL JUNG, "Neo-Malthusianismus in Australien," in *Zeitschrift für Socialwissenschaft*, Heft 8/9. E. M.

Union of Canadian Municipalities.—The powers that are obtained by railway, telephone, and other companies, irrespective of the rights of the people, have shown the cities of Canada the necessity of combining for mutual protection. With this object in view, the Union of Canadian Municipalities was formed at Toronto a year ago. Definite objects of the union are declared to be: "the securing of united action for the protection of individual municipalities and municipal interests as a whole against legislative or other encroachments of corporations," the holding of meetings to discuss subjects of interest, and the improvement of legislation upon municipal questions. During the year past union representatives have appeared before the legislatures of the provinces and the Dominion Parliament. Before the latter they presented a memorial protesting against the encroachments of corporations on the municipal control of streets. Modification of pending bills was the result. Other bills before the legislatures have been either modified or thrown out because of the action of the executive committee of the union. Telephone companies were checked in their grasping schemes, and governmental regulations in regard to rates were placed upon them. The union has secured the promise of a general act controlling rates, compelling long service connections, and looking toward a cheap national system. The municipalities are all resisting the demands of private railway and other companies. It is the purpose of the union to assist and encourage this resistance, and, if necessary, to carry every case to the highest courts. Already the power of the union is respected by corporation lawyers and its wishes are sought on bills before they are presented.—*Municipal Journal and Engineer*, September, 1902. R. M.

British Ownership of Public Utilities.—Municipal ownership and operation of street railways is making rapid progress in the United Kingdom. One-half of all such railways are owned by the various cities and towns. A number of these are leased, but the tendency even here is toward having municipalities operate the roads. One hundred street-railway undertakings, with 689 miles of track, belong to the municipalities. The total number of such undertakings is 213, with 1,307 miles of road. The tramways owned by Birmingham, Edinburgh, Oldham, and twenty-four other towns are leased, but the tendency is toward municipal operation. Birmingham is said to be a good example of profitable leasing, but the corporation has decided to municipalize the service as the leases fall. Edinburgh, with total rentals of $288,300, has a surplus profit of $26,150 after sinking-fund payments are made, but is having trouble with the companies. Tramways are operated as well as owned by forty-one municipalities, and as nearly all own their electric-lighting supply, the introduction of electric traction is proceeding economically. The main objects of this policy are the reduction of fares, symmetrical development of the suburbs, and improvements in the methods of traction. But when the investments required for equipment, construction account, and purchase of private companies have been liquidated by the operation of sinking funds, the tramway service will be a large source of profit for the relief of the taxpayer. Glasgow, Liverpool, Leeds, Sheffield, Hull, Southampton, and a host of smaller cities all make money out of their roads and have surpluses which are available for the reduction of taxes. Only one town is said to show a deficit in operating.—*Bradstreet's*, September 20, 1902.

The Need of Accurate and Uniform Social Statistics.—We can give a better account of the progress of the people of New Zealand and of some parts of India than of those of New Jersey and other states of the Union. There have been no well-directed efforts to bring about the necessary reform in the compilation and publication of statistics of the dependent, defective, and delinquent classes. Just in proportion as the facts of pauperism and crime, as the facts of health and well-being or ill-being, are honestly made public, a community will be governed honestly or otherwise. Wherever you find communities unwilling to give publicity to the facts in the case, you, as a rule, find a community which is badly governed, where public-health matters are neglected, where jails and almshouses are in bad condition, and where, of the annual revenue, but a portion is honestly expended for public needs. I believe that Massachusetts owes its commanding position as a well-governed state, and that the city of Boston owes its position as a well-governed municipality, to the fact that from almost time immemorial, commencing with the annual reports of town officers at town meetings, a precise account of the state of public affairs has been required of public officers in charge of public trusts.

Accurate statistics as to the extent of pauperism and crime could be collected through the Bureau of Labor Statistics. Without statistics, accurate and adequate, we do not know whether we are moving forward or backward. The book of Roundtree on *Poverty* is an illustration of what could be done if only there were a conviction of the social value of statistics.—F. L. HOFFMAN, in *New Jersey Conference of Charities and Corrections*, 1902.

Child Study in Chicago Schools.—Mr. Smedley has published *Child-Study Report No. 3*, the result of investigations during 1900–1901. Some very careful work was done to determine the height and size of desks best suited to the pupils of different grades and the proportion of adjustable desks required to accommodate the extreme cases.

In the laboratory pupils from over sixty schools have been examined with instruments of precision. Many parents and teachers have brought children to learn the nature and extent of sensory defects. Very bright children have been brought, to determine whether the phenomenal progress is at the expense of their physical well-being. Children who had failed to make progress in certain studies were presented to determine what the physical or mental cause of their special deficiencies might be. Children with very defective sight were examined and decision made as to whether the ordinary school or the department of the blind was best suited for them. Similar work was done with those with defective hearing, and dull, nervous, and frail children have been given advice and help.

Boys in the John Worthy (reform) School were examined to test the conclusions of the previous year, and those conclusions were confirmed by the measurements of 247 new subjects. These boys are inferior in all the principal measurements taken, and this inferiority increases with age.

After describing many tests and giving tables of observations, the report concludes with pedagogic suggestions, based on the results of the study.—*Report of the Department of Child-Study*, by F. W. SMEDLEY, Director.

H.

A Plan for the Study of Man.—Governments spend vast sums of money in charity to defectives, in education of normal persons, and in punishing criminals. This costly effort would be more economically directed if we knew more of the nature of human beings. Dr. MacDonald discusses a proposal to establish laboratories under federal patronage for the investigation of the criminal, pauper, and defective classes. The materials for such study may be found in school children, the inmates of reform schools, in prisons, shops, and wherever sufficient numbers may be examined to give a solid basis for statistical conclusions. Examples are given of generalizations relating to the connection between physical conditions and mental traits and achievements.

The importance of study of defects of sight, hearing, and the incidents of development in arranging plans of education, is illustrated by many facts derived from study of children in Chicago, Washington, and elsewhere.

Instruments used in physical examinations are described and figured, and their uses explained. Several pages are devoted to examples to show the nature of hypnotism and the uses and dangers of suggestion in medical and pedagogic treatment.

Generalizations as to growth, sight, sound, memory, skin, taste, and smell, movement, attention, volition, and moral sense are given to show the value of results already reached. The notes on criminology are largely made up of former publications of the author. At the end is a bibliography of child study.—ARTHUR MACDONALD, *Senate Document 400*, 57th Congress, 1st Session. H.

Some Divorce Statistics.—Dr. Friedrich Prinzing, it the *Zeitschrift für Socialwissenschaft*, gives some interesting divorce statistics. The number of divorces in different countries depends, of course, largely on creeds and laws, as well as on national temperament and morals; but, on the whole, the proportion of divorces to the sum total of married life is remarkably small among the European nations, ranging from 0.42 and 0.11 per thousand married couples. In Japan divorce is much more common, and in the United States the negroes largely swell the number. Everywhere it seems on the increase. A significant feature in Germany is the growing number of divorces granted on the ground of mutual agreement. For the five years ending 1897 there were in Berlin alone 173, 302, 324, 416, 457. Children, as might be expected, are the best preventive of voluntary divorce. In Berlin, in 1897–98, in one thousand divorces the surviving children were as follows: no children, 54 per cent.; one child, 21.3 per cent.; two children, 13.8 per cent.; three children, 6 per cent.; four children, 2.6 per cent.; five children, 1.1 per cent.; six children, 1 per cent. — a strong argument for large families. Early marriages among the poor cause much misery in our large towns; they are also the least-enduring unions. The vast proportion of divorces is among those who married under twenty years of age. As marriage has grown later, the ratio of divorces steadily decreases. Divorce rules highest in the sixth or seventh year after marriage.—*Journal of the Society of Comparative Legislation* (London), July, 1902.

Municipal Milk for the Children.—There are very few questions of a more serious nature than that of the great loss of life among infants. During the years 1891–1900, of every 100,000 births in London, 28,102 — more than a quarter of the whole — died before reaching the age of five. So far, only one local body in London has particularly set its mind to deal with the question. The Battersea Borough municipal council has opened a depot for sterilized humanized milk, to combat diarrhœa, one of the chief causes of the death-roll. The experiment has proved a decided success. Customers come from all parts of the borough. During this year there have been only twenty-four deaths from diarrhœa among children, as compared with 150 last year, and only in one case was the child receiving milk from the depot. It cannot be said that the depot is entirely the cause of this drop, but we think we are thoroughly justified in saying that it has in some small measure been responsible for the improved death-rate.—*Municipal Journal* (London). R. M.